FACT SHEET FOR STATE WASTE DISCHARGE PERMIT ST-7392 VERSACOLD CASCADE, INC.

INTRODUCTION

This fact sheet is a companion document to the draft State Waste Discharge Permit No. ST-7392. The Department of Ecology (the Department) is proposing to reissue this permit, which will allow discharge of screened process wastewater to the City of Lynden Wastewater Treatment Plant (WWTP). This fact sheet explains the nature of the proposed discharge, the Department's decisions on limiting the pollutants in the wastewater, and the regulatory and technical bases for those decisions.

Washington State law (RCW 90.48.080 and 90.48.160) requires that a permit be issued before discharge of wastewater to waters of the state is allowed. This statute includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into public waters of the state. Regulations adopted by the state include procedures for issuing permits and establish requirements which are to be included in the permit (Chapter 173-216 WAC).

The fact sheet and draft permit have been reviewed by the Permittee and the City of Lynden officials. Errors and omissions identified in these reviews have been corrected. Response to Comments are included in Appendix B.

GENERAL INFORMATION		
Facility Name and Address	Versacold Cascade, Inc. 406 – 2nd Street Lynden, WA 98264	
	Whatcom County	
Type of Facility	Cold Storage, Seafood and Fruit Processing	
Discharge Locations	Outfall #001: 204 – 1 st Street Latitude: 48° 56' 49" N Longitude: 122° 27' 08" W Outfall #002: 406 – 2 nd Street Latitude: 48° 56' 20" N Longitude: 122° 27' 20" W	
Treatment Plant Receiving Discharge	City of Lynden Wastewater Treatment Plant (WWTP) (WA-002257-8)	
Responsible Official	Mr. Daniel E. Shuler, General Manager PO Box 709 Lynden, WA 98264 Telephone: (360) 354-2138 FAX: (360) 354-1304	

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BACKGROUND INFORMATION

DESCRIPTION OF THE FACILITY

Versacold Cascade is a cold storage complex that occupies over 8.5 acres in Lynden. The majority of the space is used for freezing, storing, and shipping foods. As much as 50 million pounds of produce are stored and frozen in the cold storage sections. Versacold Cascade leases out space for berry processing and fish processing. This permit addresses the wastewater discharges associated with the berry and fish processing activities.

<u>Fish Processing</u>: Fish are received fresh in totes for freezing, glazing, and boxing. No primary processing occurs at this site. Bottom fish and salmon arrive cleaned and gutted for glazing and repack. Herring is occasionally cleaned, brined, frozen, boxed, and stored in one of the buildings. This activity occurs year round. The fish processing activity occurs at $406 - 2^{nd}$ Street.

<u>Berry Processing</u>: Raspberries and blueberries are received in containers from off-site fruit processors, and are washed and packaged for either the fresh or frozen market. Berry operations occur for a ten-week period only, between June and August, and the process wastewater consists of washwater only. The berry washing activity occurs at $204 - 1^{st}$ Street in Lynden.

There are no specific pretreatment standards for existing or new sources listed for these industries (40 CFR Part 408, Subpart AF-Non-Alaskan Herring Fillet Processing Subcategory) or for berry processing (40 CRR Part 407, Subpart F, Canned and Preserved Fruits Subcategory_.

HISTORY

In December 1996, an ammonia leak occurred in a brine chiller during herring processing. The brine, contaminated with the ammonia, was released to the Lynden WWTP system, causing an upset at the plant. A Notice of Correction was issued requiring Versacold Cascade, Inc., to apply for a state waste discharge permit. Versacold Cascade, Inc., was issued State Waste Discharge Permit ST-7392 on February 3, 1998. The permit had a flow limit of 20,000 gpd based on the actual wastewater discharged at the time of permit issuance. The permit had no TSS or BOD limits, only monitoring.

The City of Lynden and Shuksan Frozen Foods, Inc., agreed via a contract on September 14, 1981, that the food processors, Seabrook and Shuksan, were allocated 0.59 MGD, 9570 pounds per day of BOD, and 3104 pounds per day of suspended solids in the City of Lynden Wastewater Treatment Plant. Over the years, various industrial dischargers including berry processors and seafood processors have occupied the former Shuksan and Seabrook facilities. Versacold Cascade took over the Seabrook and Shuksan operations in the early 1980's, overseeing the cold storage warehouses and various berry and seafood processing operations. The flow limitations on previous individual permits have been between 20,000 and 40,000 gpd, based on actual wastewater discharged, not WWTP allocations.

The original flow and BOD allocations for Versacold were evaluated and reallocated in 1988, 1993, and 2001. Allocations were based on plant capacity, and factored in industrial user contributions, domestic and sanitary use, infiltration and inflow (I/I) and growth reserve.

The City of Lynden entered into a contractual agreement with Versacold Cascade on February 11, 2004, that superseded all other prior agreements. Under Section 4.02 of this agreement, Versacold Cascade and its tenants (exclusive of the West Farm Food component) shall not exceed industrial wastewater discharge limits of 150,000 gallons per day (gpd) for flow, 1450 pounds per day (ppd) BOD₅, and 500 ppd TSS. The contract identifies the Versacold facilities as $412 - 2^{nd}$ Street, $406 - 2^{nd}$ Street, and $201 - 1^{st}$ Street, all in the city of Lynden. This contract expires December 31, 2008.

The City of Lynden reevaluated capacity allocations for industrial discharges in a document dated June 23, 2005. In the document, the consultants assessed the industrial contributors and plant capacity and concluded that the current requests for treatment from the industrial discharges are within the limits of their agreements and consistent with the basis of the WWTP design.

INDUSTRIAL PROCESSES

This permit covers the wastewater created by a berry washing operation (in the former Carriage House space) and a seafood processing operation conducted at Versacold Cascade. Five to six million pounds of fish are processed (glazed and repacked) per year, about half of which are fresh. Production is seasonal. Herring processing, which is the main contributor of wastewater of concern, is conducted approximately 12 days per year. The peak herring processing season occurs December through March.

Outfall #002 covers the berry processing operations. Fresh raspberries and blueberries arrive by truck, are washed and sorted, and packaged for either fresh fruit sales or freezing. Wastewater flow will be from berry washing and is expected to be less than 10,000 gpd. Berry operations occur during a ten-week window during the months of June through August each year.

TREATMENT PROCESSES

Outfall #001: Waste water is generated from fresh whole herring processing, clean-up, brine discharge, and condenser cooling. The waste water flows to a sump and is pumped over a fine mesh hydrasieve prior to discharge to the Lynden wastewater treatment system. Flows are estimated at less than 40,000 gallons per day. The main pollutants of concern are BOD₅ and TSS.

Outfall #002: Process wastewater is generated from washing fresh raspberries and blueberries. The wash water flows to an outside, covered sump, is pumped over a fine mesh screen prior to entering the City of Lynden wastewater treatment system. Flows are expected to be less than 10,000 gpd during the approximately ten-week operating time frame. The main pollutant of concern is low pH.

PERMIT STATUS

The previous permit for this facility was issued on November 17, 2000, and expired on June 30, 2005. An application for permit renewal was submitted to the Department on February 8, 2005, and accepted by the Department on March 14, 2005. The permit was administratively extended June 10, 2005.

SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT

Versacold Cascade last received an inspection on March 5, 2003. During the history of the previous permit, the Permittee has remained in compliance based on Discharge Monitoring Reports (DMRs) and other required reports and inspections conducted by the Department.

WASTEWATER CHARACTERIZATION

A two-year summary shows the concentration of pollutants in the discharge (outfall #001) as reported in the DMRs, for the following parameters:

Parameter	Concentration/Volume Range	Average
Flow, gpd	3,124 – 45,096	13,830
BOD ₅ , mg/L	30 – 1,082	255
BOD ₅ , lb/day	1.19 – 203	33
TSS, mg/L	6 – 530	221
pH, standard units	Between 5.7 and 8.7	

This data represents the fish repack activities and not berry processing.

PROPOSED PERMIT LIMITATIONS

State regulations require that limitations set forth in a waste discharge permit must be based on the technology available to treat the pollutants (technology-based) or be based on the effects of the pollutants to the POTW (local limits). Waste water must be treated using all known available and reasonable methods of prevention, control, and treatment (AKART) and not interfere with the operation of the POTW.

The minimum requirements to demonstrate compliance with the AKART standard and specific design criteria for this facility were determined using best professional judgment (BPJ) referencing the Environmental Protection Agency (EPA) contract document, <u>Reassessment of Effluent Limitations Guidelines and New Source Performance Standards for the Canned and Preserved Seafood Processing Point Source Category</u> (1979).

The "best conventional pollutant control technology" (BCT) limits recommended in the document were achieved through in-plant changes to reduce water flow and waste loads, in addition to coarse screening (0.75"), followed by fine mesh screening, defined as 20 mesh or finer.

There are no numerical pretreatment standards for BOD₅, pH, or TSS for new or existing sources in the seafood processing industry listed in 40 CFR Part 408. There are no numerical pretreatment standards for BOD₅, pH, or TSS for new or existing sources in the berry processing industry listed in 40 CFR Part 407. Additionally, Versacold is a seafood repack facility, not raw fish processing which includes cleaning and gutting.

The more stringent of the local limits-based or technology-based limits are applied to each of the parameters of concern. Each of these types of limits is described in more detail below.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS

All waste discharge permits issued by the Department must specify conditions requiring available and reasonable methods of prevention, control, and treatment of discharges to waters of the state (WAC 173-216-110). The following permit limitations are necessary to satisfy the requirement for AKART:

All process wastewater (including clean-up water) shall be screened through 20-mesh screening or finer prior to discharge to the Lynden sanitary sewer system.

In order to protect the City of Lynden WWTP from pass-through, interference, concentrations of toxic chemicals that would impair beneficial or designated uses of sludge, or potentially hazardous exposure levels, limitations for certain parameters are necessary. Applicable limits for this discharge include the following:

pH Between 5.0 and 11.0 standard units

EFFLUENT LIMITATIONS BASED ON LOCAL LIMITS

The City of Lynden has assigned allocations for both BOD₅ and TSS to major industrial dischargers in the city. The BOD₅ and TSS limits in this permit are based on the contract signed between Versacold Cascade and the City of Lynden on February 11, 2004.

The flow limits listed in the current Versacold permit are not designated allocations from the City of Lynden, but are based on actual wastewater volumes requested by Versacold. The City of Lynden allocated 150,000 gallons per day to Versacold and their tenants. Versacold has requested a permit limit of 50,000 gpd.

Pollutant concentrations in the proposed discharge with technology-based controls in place are not expected to cause problems at the receiving POTW, such as interference, pass-through, or hazardous exposure to POTW workers, nor are they expected to result in unacceptable pollutant levels in the POTW's sludge.

COMPARISON OF LIMITATIONS WITH THE EXISTING PERMIT ISSUED DECEMBER 17, 2000

Parameter	Existing Limits	Proposed Limits
Flow	40,000 gpd	50,000 gpd
pН	5 - 11 standard units	5 - 11 standard units
BOD ₅	400 pounds per day 1,000 mg/L	400 pounds per day 1,000 mg/L
TSS	Monitoring only	500 pounds per day

The proposed limits are for all Versacold facilities in the city of Lynden area, as defined in the Background Information section.

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are specified to verify that the treatment process is functioning correctly, and that effluent limitations are being achieved (WAC 173-216-110).

The monitoring schedule is detailed in the proposed permit under Condition S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

OTHER PERMIT CONDITIONS

REPORTING AND RECORD KEEPING

The conditions of S3 are based on the authority to specify any appropriate reporting and record keeping requirements to prevent and control waste discharges [WAC 273-216-110 and 40 CFR 403.12 (e), (g), and (h)].

OPERATIONS AND MAINTENANCE

The proposed permit contains Special Condition S4 as authorized under Chapter 173-240-150 WAC and Chapter 173-216-110 WAC. It is included to ensure proper operation and regular maintenance of equipment, and to ensure that adequate safeguards are taken so that constructed facilities are used to their optimum potential in terms of pollutant capture and treatment.

PROHIBITED DISCHARGES

Certain pollutants are prohibited from being discharged to the POTW. These include substances which cause pass-through or interference, pollutants which may cause damage to the POTW or harm to the POTW workers (Chapter 173-216 WAC), and the discharge of designated dangerous wastes not authorized by this permit (Chapter 173-303 WAC).

DILUTION PROHIBITED

The Permittee is prohibited from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limitations.

SPILL PLAN

The Department has determined that the Permittee stores a quantity of chemicals that have the potential to cause water pollution if accidentally released.

The Department has the authority to require the Permittee to develop best management plans to prevent this accidental release under Section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA) and RCW 90.48.080.

The Permittee has developed a plan for preventing the accidental release of pollutants to state waters and for minimizing damages if such a spill occurs. The proposed permit requires the Permittee to update this plan and submit it to the Department by May 1, 2006.

SLUG DISCHARGE CONTROL PLAN

The Department has determined that the Permittee has the potential for a batch discharge or a spill that could adversely affect the POTW. Therefore, a Slug Discharge Control Plan is required [40 CFR 403.8 (f)]. Since a Slug Discharge Control Plan was submitted during the last permit cycle, the Permittee is required to review the plan at least once every two years and update it as needed.

GENERAL CONDITIONS

General Conditions are based directly on state laws and regulations and have been standardized for all industrial waste discharge to POTW permits issued by the Department.

Condition G1 requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2 requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3 specifies conditions for modifying, suspending, or terminating the permit. Condition G4 requires the Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5 requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6 prohibits the Permittee from using the permit as a basis for violating any laws, statutes, or regulations. Conditions G7 and G8 relate to permit renewal and transfer. Condition G9 requires the Permittee to control production or wastewater discharge in order to maintain compliance with the permit. Condition G10 prohibits the reintroduction of removed pollutants into the effluent stream for discharge. Condition G11 requires the payment of permit fees. Condition G12 describes the penalties for violating permit conditions.

PUBLIC NOTIFICATION OF NONCOMPLIANCE

A list of all industrial users which were in significant noncompliance with Pretreatment Standards or Requirements during any of the previous four quarters may be annually published by the Department in a local newspaper. Accordingly, the Permittee is apprised that noncompliance with this permit may result in publication of the noncompliance.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics. The Department proposes that the permit be issued for a term of five years.

REFERENCES FOR TEXT AND APPENDICES

Environmental Protection Agency (EPA).

- 1979. EPA Contract Development Document, <u>Reassessment of Effluent Limitations</u>
 <u>Guidelines and New Source Performance Standards for the Canned and Preserved</u>
 <u>Seafood Processing Point Source Category.</u> 68-01-3287
- Code of Federal Regulations, 40 CFR Part 408, for <u>Canned and Preserved Seafood Processing Point Source Category</u>.
- Code of Federal Regulations, 40 CFR Part 407, for <u>Canned and Preserved Fruits and Vegetables Processing Point Source Category.</u>
- Application for Wastewater Discharge Permit for Discharge of Industrial Wastewater to a POTW, submitted February 8, 2005.

Washington State Department of Ecology.

2002. Permit Writer's Manual.

City of Lynden Public Works
Utility Service Agreement for Industrial Wastewater Treatment Services, February 11, 2004.

APPENDICES

APPENDIX A—GLOSSARY

Average Monthly Discharge Limitation—The average of the measured values obtained over a calendar month's time.

Best Management Practices (BMPs)—Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural, and/or managerial practices to prevent or reduce the pollution of waters of the state. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD₅—Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD₅ is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the Federal Clean Water Act.

Bypass—The intentional diversion of waste streams from any portion of the collection or treatment facility.

Categorical Pretreatment Standards—National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories.

Compliance Inspection - Without Sampling—A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Composite Sample—A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite" (collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots).

Engineering Report—A document, signed by a professional licensed engineer, which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Grab Sample—A single sample or measurement taken at a specific time or over as short a period of time as is feasible.

Industrial User—A discharger of wastewater to the sanitary sewer which is not sanitary wastewater or is not equivalent to sanitary wastewater in character.

Industrial Wastewater—Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business; from the development of any natural resource; or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Interference—A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and

Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) [including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA) and including State regulations contained in any State Sludge Management Plan prepared pursuant to Subtitle D of the SWDA], sludge regulations appearing in 40 CFR Part 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research, and Sanctuaries Act.

Local Limits—Specific prohibitions or limits on pollutants or pollutant parameters developed by a POTW.

Maximum Daily Discharge Limitation—The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Pass-through—A discharge which exits the POTW into waters of the state in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or which is a cause of a violation of State water quality standards.

pH—The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Potential Significant Industrial User—A potential significant industrial user is defined as an Industrial User which does not meet the criteria for a Significant Industrial User, but which discharges wastewater meeting one or more of the following criteria:

a. Exceeds 0.5 % of treatment plant design capacity criteria and discharges <25,000 gallons per day; or

b. Is a member of a group of similar industrial users which, taken together, have the potential to cause pass-through or interference at the POTW (e.g., facilities which develop photographic film or paper, and car washes).

The Department may determine that a discharger initially classified as a potential significant industrial user should be managed as a significant industrial user.

Significant Industrial User (SIU)—

- 1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; and
- 2) Any other industrial user that discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority* on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement [in accordance with 40 CFR 403.8(f)(6)].

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority* may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

*The term "Control Authority" refers to the Washington State Department of Ecology in the case of non-delegated POTWs or to the POTW in the case of delegated POTWs.

Slug Discharge—Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge to the POTW. This may include any pollutant released at a flow rate which may cause interference with the POTW.

State Waters—Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Stormwater—That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body or a constructed infiltration facility.

Technology-based Effluent Limit—A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Suspended Solids (**TSS**)—Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly,

suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

APPENDIX B—RESPONSE TO COMMENTS

No comments were received during the Public Comment period.